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AVIATION SECURITY

FAA's Actions to Study Responsibilities and Funding for Airport Security and to Certify Screening Companies

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Resources, Community, and
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Congressional Committees and Subcommittees

After the explosion of Pan Am Flight 103 in 1988, the Congress focused its
attention on increasing aviation security, which culminated in the passage
of the Aviation Security Improvement Act of 1990. Congressional interest
was renewed in 1996 by the still unexplained crash of TWA Flight 800,
which resulted in additional efforts by the federal government to increase
aviation security. These efforts included the establishment of the White
House Commission on Aviation Safety and Security in August 1996. The
Commission's report, issued in February 1997, [1] made a number of
recommendations to improve aviation security. In addition, two laws were
enacted—the Federal Aviation Reauthorization Act of 1996 and the
Omnibus Consolidated Appropriations Act of 1997[2] —which, among other
things, authorized and provided funding for the security recommendations
contained in the Commission's report.

The Reauthorization Act required the Federal Aviation Administration
(FAA) to take specific actions to improve aviation security. Section 301
mandated that FAA conduct a study and report to the Congress by
January 9, 1997, on whether and, if so, how to (1) transfer certain federally
required security responsibilities of air carriers to either airports or the
federal government or (2) provide for shared responsibilities between air
carriers and airport operators or the federal government. The Congress
required that the report identify potential sources of federal and
nonfederal revenue that may be used to fund security activities and
propose legislation, if necessary, for accomplishing the transfer of
responsibilities. Section 302 of the act mandated that the FAA
Administrator certify companies providing security screening at airports
and improve the training and testing of security screeners[3] through the
development of performance standards. This report provides information
on (1) the status of FAA's efforts to implement the requirements of section

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[1]Final Report to President Clinton, White House Commission on Aviation Safety and Security (Feb. 12,
1997).

[2]The Federal Aviation Reauthorization Act of 1996 (P.L. 104-264) was enacted on October 9, 1996, to
reauthorize programs of the Federal Aviation Administration and for other purposes. The Omnibus
Consolidated Appropriations Act of 1997 (P.L. 104-208) was enacted on September 30, 1996, and
provided $144.2 million for the purchase of commercially available advanced explosives detection
equipment for checked and carry-on baggage.

[3]Screeners are air carriers' or screening companies' security staff who examine all passengers and
other persons and all property intended to be carried in the cabin of airplanes or into controlled areas
to prevent any explosive, incendiary, or other deadly object or dangerous weapon from being carried
aboard airplanes or into controlled areas.

301 of the act and (2) the status of FAA's efforts to implement section 302 and issues that could impede FAA's implementation of section 302.

Results in Brief

FAA issued the report required by section 301 of the Reauthorization Act in January 1999, about 2 years after the date mandated in the act.[4] The report concludes that there should be no change to the current system of shared aviation security responsibilities among FAA, the air carriers, and the airport operators or to the current funding sources for aviation security. FAA's conclusions are based on the lack of any consensus in the civil aviation community for changes.

To comply with the requirements of section 302, FAA is developing a proposed regulation, which would require the certification of screening companies. The proposed regulation would require screening companies and air carriers to comply with uniform performance standards for screeners and implement FAA-approved training and testing programs for screeners. A critical step in the certification of screening companies is having a reliable and consistent way to measure the screening companies' performance. In January 1999, FAA, after several delays, validated that its automated screener testing system is an accurate measurement of screeners' performance. Over the next several months, FAA will gather additional data for use in developing performance standards for screeners. The agency plans to issue a Notice of Proposed Rulemaking in late 1999 for comment and issue a final regulation in late 2000. The aviation industry generally agrees that national standards for security-screening operations are needed. Several issues could impede the issuance of the final regulation. For example, the completion of FAA's validation process had been delayed several times and any further delays with completing FAA's current efforts could affect the issuance of the final regulation.

Background

FAA, the air carriers, and the airport operators share the responsibilities for aviation security. FAA is responsible for assessing threats, such as terrorism, to the aviation system and determining the procedures and equipment that will most effectively deter these threats. FAA's regulations prescribe the security responsibilities of air carriers and airport operators. The air carriers and airport operators are responsible for complying with the regulations and procedures. The air carriers are responsible for screening all passengers and baggage, hiring and training their employees or contracting for screening services, and procuring equipment to screen

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[4]Study and Report to Congress on Aviation Security Responsibilities and Funding, FAA (Jan. 5, 1999).

passengers and baggage. The screening of passengers and baggage is a critical element in FAA's strategy against terrorism. FAA's regulations provide basic standards for the screeners, equipment, and procedures to be used in screening operations. The airport operators are responsible for providing secure airport facilities and providing local law enforcement support relating to air carrier and airport security measures.

The funding of the security operations is divided among FAA, the air carriers, and the airport operators. FAA is responsible for paying the salaries and costs associated with its oversight of air carrier and airport security programs, including security inspections of screening operations at airports, and for aviation security research and development activities. FAA's aviation security budget for fiscal year 1999 includes $100 million for purchasing and deploying advanced explosives detection equipment to selected airports, $52 million for research and development, and $123 million for operations. Air carriers are responsible for paying for the security personnel and checkpoint screeners, screening equipment, such as X-ray machines and metal detectors, and the operation and maintenance costs of that equipment. Airport operators are responsible for paying for law enforcement officers, access control systems, and perimeter fences and lighting. Currently, airport operators can fund certain security functions, such as perimeter fencing, with funds from FAA's Airport Improvement Program.[5]

Both the White House Commission and the Congress recognized the need to improve screeners' performance. The Commission's initial report in September 1996 made 20 specific recommendations for improving security, one of which was the development of uniform standards for the selection, training, certification, and recertification of screening companies and their employees.[6] Following this report, the Federal Aviation Reauthorization Act mandated that FAA (1) study and report on the current security responsibilities at airports and the potential sources of funding for these activities, (2) certify screening companies, and (3) improve the training and testing of security screeners through the development of performance standards for security-screening services. While FAA currently has training and testing requirements for screeners, it does not have a requirement that screening companies be certified.

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[5]FAA's Airport Improvement Program provides federal funding for planning and development at the 3,300 airports that make up the national airport system.

[6]These recommendations were also contained in the Final Report to President Clinton, White House Commission on Aviation Safety and Security (Feb. 12, 1997).

Section 301 Report Issued in January 1999

FAA issued the report required under section 301 of the Reauthorization Act of 1996 on January 5, 1999, about 2 years after the date mandated in the act. FAA's report concludes that there should be no change to the current system of shared aviation security responsibilities among FAA, the air carriers, and the airport operators or to the current funding sources for aviation security.

Report Issued 2 Years Late

FAA did not meet the January 9, 1997, deadline established by section 301 of the Reauthorization Act for submitting its report to the Congress. In a letter dated January 21, 1997, FAA informed the Senate Committee on Commerce, Science and Transportation that because the act directed FAA to consider the findings of the White House Commission on Aviation Safety and Security and because of the time required to complete analytical work, FAA was unable to meet the January 9, 1997, deadline and expected to release its report in April 1997. The report was delivered to the Congress in January 1999.

FAA officials said the report was delayed because of the complex issues involved and the need to consider the findings of numerous groups that have studied these issues. FAA's report is based, in part, on an 8-year-old internal FAA study that analyzed alternatives for shifting security responsibilities with respect to passengers, baggage, and cargo from the air carriers to airport operators.[7] The study is appended to the report. FAA also reviewed other reports, including reports from the President's Commission on Aviation Security and Terrorism,[8] the White House Commission on Aviation Safety and Security,[9] the National Civil Aviation Review Commission,[10] and Coopers & Lybrand.[11]

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[7]FAA Study on Security Responsibilities (1991).

[8]Report of the President's Commission on Aviation Security and Terrorism (May 15, 1990).

[9]See footnote 1.

[10]Avoiding Aviation Gridlock & Reducing the Accident Rate, A Consensus for Change (Dec. 1997). The Federal Aviation Reauthorization Act of 1996 established the National Civil Aviation Review Commission and required a report to the Secretary of Transportation setting forth a comprehensive analysis of the Administration's budgetary requirements through 2002.

[11]Federal Aviation Administration: Independent Financial Assessment, Coopers & Lybrand (Feb. 28, 1997). The Federal Aviation Reauthorization Act of 1996 required FAA to contract with an independent entity to conduct a complete independent assessment of the financial requirements of the agency through 2002.

In addition, FAA conducted a literature search and reviewed testimony provided for the White House Commission on Aviation Safety and Security and various congressional hearings on aviation security.

No Consensus for Changing Security Responsibilities or Funding Sources

FAA's report considered the views of the various commissions and other parties that studied or commented on transferring air carriers' security responsibilities to the airport operators or to the federal government, or for sharing responsibilities among the air carriers, the airport operators, and the federal government. The report also considered the Commissions' and other parties' views on potential sources of funding for aviation security, such as the Airport Improvement Program, Passenger Facility Charges,[12] and user fees. The report points out that the source of security funding has been a matter of continuing controversy over the last 30 years.

FAA concluded that there appears to be a consensus in the civil aviation community to retain the current system of shared responsibilities for aviation security. Therefore, FAA would continue to be responsible for establishing and enforcing regulations, policies, and procedures and for identifying potential threats and appropriate countermeasures. Air carriers would bear the primary responsibility for applying screening and other security measures to passengers, baggage, and cargo. Airport operators would be responsible for maintaining a secure airport environment and for providing local law enforcement support.

FAA also concluded that there is no apparent consensus for changing the overall system of funding for aviation security and that there is no definitive answer to the long-standing question of who should pay for aviation security. FAA therefore did not make any legislative proposals for transferring security responsibilities from air carriers or any recommendations for changing funding sources. FAA officials, however, stated that even though the report made no recommendations regarding funding sources for aviation security, this issue will continue to need discussion and study because of its high cost. FAA estimated in May 1997 that the total 10-year cost to the federal government, airport authorities, and the airlines for security programs at the nation's largest and busiest airports alone would be close to $3 billion. Thus, funding methods for aviation security improvements is an issue that the Congress and FAA will be faced with for a number of years.

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[12]A Passenger Facility Charge is a fee imposed by airport authorities on passengers to be used to fund capital development.

Officials of three principal aviation industry associations that we contacted—Air Transport Association (ATA),[13] Airports Council International-North America (ACI-NA),[14] and American Association of Airport Executives (AAAE)[15] —generally agreed with the current division of airport security responsibilities. These officials stated that the continuity of screening would be broken if the air carriers were not the ultimate responsible party. For example, under current procedures, if a passenger is identified as a potential threat at the airport check-in or ticket counter, the air carrier will label the passenger's bag appropriately and that air carrier will take additional security measures for examining the passenger's bag, such as sending the bag through explosives detection equipment. Under any scenario where the carrier is not responsible for all screening operations, the air carrier would have to transfer the information about the potential security threat to another entity, such as the airport operator, and then that entity would further scrutinize the passenger's bag. This would disrupt the continuity of the baggage-screening process and allow for a potential break in the chain of information.

The associations expressed differing views with regard to funding aviation security. Two of the associations—ACI-NA and AAAE—believe that the federal government should provide the initial funding for any increase in the baseline security standards and then, through the use of increased Airport Improvement Program funding and an expanded local funding mechanism, namely the Passenger Facility Charge, the airport users would have a greater ability to raise funds for the increased security. However, the third association, ATA, does not support an increased Passenger Facility Charge for security improvements at airports. ATA believes that the funding for explosives-detection-screening equipment should be provided under direct federal appropriations and not from Airport Improvement Program funds and Passenger Facility Charges.

[13]ATA is the trade organization for the principal U.S. air carriers.

[14]ACI-NA represents airport operators who operate about 1,250 airports across 155 countries and territories.

[15]AAAE is a professional organization representing airport management personnel at public use airports nationwide.

Lengthy Process Involved for Implementing the Section 302 Requirement for Certifying Screening Companies

FAA is developing a regulation to comply with the mandated section 302 requirements to certify screening companies and improve the training and testing of security screeners. FAA expects the final regulation to be issued in late 2000. While the aviation industry generally agrees that national standards for security-screening operations are needed, some issues could impede the final regulation's issuance.

FAA's Efforts to Comply With Section 302

FAA plans to issue a new regulation that would establish the requirements for certifying screening companies.[16] One of the requirements for certification would compel screening companies and air carriers to comply with the performance standards that would be established by FAA and to implement FAA-approved training and testing programs for screeners. As the first step toward issuing a regulation, FAA, on March 11, 1997, issued an Advance Notice of Proposed Rulemaking requesting comments and suggestions on issues related to the certification of screening companies and the improvement of screening operations. FAA identified 10 issues of particular interest. They included the establishment, by regulation, of a uniform security-screening program for use by all air carriers and screening companies, methods for measuring screeners' performance, and a curriculum for training screeners. FAA also sought comments on the estimated costs of meeting any qualification or operational requirements that might be imposed. (See app. I for a list of all the issues on which FAA requested comments.)

FAA recognizes that a critical step in the certification of screening companies is having a reliable and consistent way to measure their performance. By collectively analyzing and measuring screener's performance, FAA can hold screening companies accountable for safe, effective screening operations. FAA has focused its efforts on developing, field testing, and validating an automated screener testing-system called Threat Image Projection (TIP) which would provide the basis for establishing and monitoring performance standards for screening companies.

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[16]The proposed regulation would define a screening company as an air carrier or other entity that inspects persons or property for the presence of any unauthorized explosive, incendiary, deadly or dangerous weapon, or destructive substances before entry into a controlled area or carriage aboard an aircraft.

TIP is an automated system that was developed to improve and maintain the effectiveness of image interpretation by screening personnel employed at screening locations in airports. When installed on existing X-ray machines at airport checkpoints, TIP tests screeners' detection capabilities by projecting threat images, including guns and explosives, into bags as they are being screened or projecting images of bags containing threat objects onto the X-ray screen as live baggage is being screened.[17] Screeners are then responsible for positively identifying the threat image and calling for the bag to be searched. Once prompted, TIP indicates to the screener whether the threat is real and then records the screener's performance in a database that FAA can access to analyze performance trends. TIP exposes screeners to threat images on a routine basis to enable them to become more adept at recognizing threat objects.

In order to adequately field test and validate the proposed automated screener-testing system—TIP—and to continue to collect and analyze data to develop performance standards for screeners, FAA withdrew the Advance Notice of Proposed Rulemaking on May 13, 1998, and changed the estimated issuance date of its Notice of Proposed Rulemaking from March 1999 to the end of 1999. FAA expects to issue its final regulation within 1 year of the closing of the comment period for the Notice of Proposed Rulemaking, which would be by the end of 2000. In April 1998, we reported that FAA, at that time, planned to issue the final regulation in March 2000, which was about a year behind its previous estimated issuance date.[18]

In February 1999, FAA officials told us that during January 1999, they had analyzed the TIP data gathered to date and validated TIP as an effective and reliable means to measure screeners' performance. The completion of this effort, previously projected for September 1998, had been delayed several times. According to FAA, TIP's validation process had been slowed because of one manufacturer's slowness in bringing the equipment to an operating level. In addition, the validation of TIP had been further delayed by its

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[17]FAA will propose that TIP be installed initially on X-ray and explosives-detection systems at all Category X and Category I airports. The installations at Category II through Category IV airports would be phased in during subsequent years. Screeners' performance at these smaller airports, which, according to FAA officials, account for only about 5 percent of the passengers boarding planes, would be measured in the interim by existing and/or enhanced checkpoint-testing procedures, including the use of special testing and the random testing of screeners by air carriers and FAA. Category X airports represent the nation's largest and busiest airports as measured by the volume of passenger traffic and are potentially attractive targets for criminal and terrorist activity. Category I airports are somewhat smaller airports that have an annual volume of at least 2 million passengers.

[18]Aviation Security: Implementation of Recommendations Is Under Way, but Completion Will Take Several Years (GAO/RCED-98-102, Apr. 24, 1998).

software, which did not provide enough unique identification numbers for all screeners using TIP. FAA has since corrected that problem. During the next several months, FAA will continue to gather larger samples of TIP data that it can use to develop performance standards for screeners.

Industry's Views on Section 302

Our review of comments to the Advance Notice of Proposed Rulemaking from air carriers, screening companies, airport operators, and associations representing segments of the aviation industry showed that most agreed that a national standard security-screener program for screening companies should be established. Many of the comments also stated that certification for individual screeners should also be required. Several commenters believed that certification would enhance screeners' performance and professionalism. For example, both AAAE and ACI-NA stated that FAA needs to develop a standard training curriculum to certify individual screeners. They stated that FAA-certified screeners would then be invested with a valuable and transferable skill and would be compensated accordingly. FAA, however, does not plan to require the certification of individual screeners because it does not have statutory authority to do so but, instead, will certify companies. In addition, officials from ATA, ACI-NA, and AAAE informed us that, in their opinion, all screening companies who wish to be certified to perform aviation security screening should be regulated by FAA, that FAA should develop a minimum national standard security-screening program, and that FAA should continue to perfect a consistent way to measure screening companies' performance. These actions are consistent with FAA's proposed approach for certifying screening companies.

Issues That Could Impede Issuance of Final Rule

The Federal Aviation Reauthorization Act of 1996 allows FAA 16 months from the close of the comment period of a Notice of Proposed Rulemaking to publish the final regulation. FAA plans to expedite the process by publishing the final rule within 1 year of the closing of the comment period, which would be at the end of 2000. FAA believes that it is important to implement the final regulation at the earliest date possible to realize the performance improvements expected to be brought about by the proposed certification requirements, training requirements, and performance measurements and standards. However, several issues could impede FAA's efforts to complete this undertaking.

In addition to the TIP validation and data-gathering efforts previously discussed, the human factors[19] staff in FAA's Office of Aviation Research is conducting a sophisticated and long-term evaluation using TIP to assess how such variables as screeners' experience, method of training, checkpoint operating environment, and shift lengths affect screeners' performance. TIP is still in the research and development stage; therefore, the Office of Aviation Research developed a test and evaluation plan for TIP.[20] The effort is expected to be completed by mid-1999. This assessment could identify issues regarding screeners' performance that would have to be addressed and could potentially delay the issuance of the regulation. We have previously pointed out the importance of internal coordination between human factors research programs and all units within FAA in order to (1) understand the relationship between human performance capabilities and limitations and the means to measure them and (2) maximize the opportunity to leverage resources for research on human factors.[21]

In addition, FAA has identified other issues that must be addressed before the final regulation can be issued, including (1) ensuring that the costs of the rule will result in substantial screening improvements and (2) establishing a balance of responsibilities between carriers and screening companies that is clear and effective. FAA is preparing a cost and benefits analysis for inclusion in its Notice of Proposed Rulemaking on which interested parties will have the opportunity to comment. According to FAA, the costs for this regulation could be relatively high, and it is imperative that the regulation result in substantial measurable improvements to an individual screener's performance, to screening companies' operations, and in decreasing the aviation security system's vulnerabilities.

The issue of balanced responsibility involves how much responsibility screening companies should assume and how air carriers should oversee the operations of screening companies. FAA recognizes that the successful implementation of its proposed regulation will require it to clearly outline

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[19]The study of human factors examines how humans interact with machines and other people and determines whether procedures and regulations take into account abilities and limitations. Identifying chances for human error can reduce the need for later replacing or modifying equipment and procedures.

[20]Test and Evaluation Plan for Airport Demonstration for Threat Image Projection for Checkpoint Operations (Aug. 1996).

[21]Human Factors: Status of Efforts to Integrate Research on Human Factors Into FAA's Activities (GAO/RCED-96-151, June 27, 1996).

this division of responsibility and create enforcement guidance that will avoid any confusion regarding accountability.
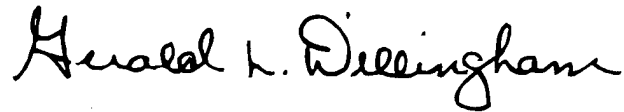
Scope and Methodology

To determine the status of FAA's efforts to implement sections 301 and 302 of the Federal Aviation Reauthorization Act of 1996, we reviewed the legislation and other related documents, such as the Final Report of the White House Commission on Aviation Safety and Security. We obtained FAA's implementation plans and status reports and interviewed officials in FAA's Office of Civil Aviation Security and the Office of Aviation Research. Upon its issuance in January 1999, we obtained FAA's report to the Congress required by section 301 of the Reauthorization Act. We obtained industry's views by reviewing comments provided in response to the Advance Notice of Proposed Rulemaking and by meeting with representatives of three aviation associations: ATA, ACI-NA, and the AAAE. We conducted our review from August 1998 through January 1999 in accordance with generally accepted government auditing standards.

Agency Comments

We provided the Department of Transportation and FAA with a draft of this report for review and comment. We met with agency officials, including representatives of FAA's Office of Civil Aviation Security Policy and Planning. FAA generally agreed with the facts in the report and provided updated information on its validation of the Threat Image Projection system and some suggested clarifying language, which we incorporated as appropriate.

As agreed with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 7 days from the date of this letter. At that time, we will send copies to interested congressional committees, the Secretary of Transportation, and the Administrator of FAA. We will make copies available to others upon request.

Major contributors to this report include A. Donald Cowan, Robert J. Di Vito, and Barry R. Kime. Please call me on (202) 512-3650 if you have any questions about the report.

Gerald L. Dillingham
Associate Director,
   Transportation Issues

List of Congressional Committees and Subcommittees

The Honorable John McCain
Chairman
The Honorable Ernest F. Hollings
Ranking Minority Member
Committee on Commerce, Science,
    and Transportation
United States Senate

The Honorable Slade Gorton
Chairman
The Honorable John D. Rockefeller IV
Ranking Minority Member
Subcommittee on Aviation,
Committee on Commerce, Science,
    and Transportation
United States Senate

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Abbreviations

AAAE	American Association of Airport Executives
ACI-NA	Airports Council International-North America
ATA	Air Transport Association
FAA	Federal Aviation Administration
TIP	Threat Image Projection

Issues on Which FAA Sought Public Comment in Its Advance Notice of Proposed Rulemaking

1. Oversight by Air Carriers: Guidelines that an air carrier should follow when selecting or overseeing a screening company.

2. Joint-Use Screening Locations: Methods of structuring air carriers' selection of a screening company for joint-use screening locations and oversight of that screening company's activities.

3. Screening Security Program: The regulatory establishment of a uniform screening-security program for use by all carriers and screening companies, the prevention of the unauthorized use of these standards, and the establishment of performance standards for screeners.

4. Screener Training: Requirement to incorporate into each security program the specific curriculum to be used for training screeners.

5. Qualifications and Operations of Screening Companies: Minimum standards for a screening company to be certified in the areas of local and national qualifications, aviation-screening experience, and screening and training equipment.

6. Individual Screeners: Encouraging a stronger sense of professionalism.

7. Screening by Air Carriers: Whether screening by air carriers should be subject to the same standards as certified screening companies.

8. New Screening Companies: Ensuring the qualifications of a company that has no aviation screening experience before it begins aviation screening.

9. Checkpoint Operational Configuration Deficiencies: The configuration of checkpoints for optimal screening conditions.

10. Foreign Air Carriers: The regulation's application and impact on foreign air carriers.

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Related GAO Products

Aviation Security: FAA's Deployments of Equipment to Detect Traces of Explosives (GAO/RCED-99-32R, Nov. 13, 1998).

Aviation Security: Progress Being Made, but Long-Term Attention Is Needed (GAO/T-RCED-98-190, May 14, 1998).

Aviation Security: Implementation of Recommendations Is Under Way, but Completion Will Take Several Years (GAO/RCED-98-102, Apr. 24, 1998).

Aviation Safety: Weaknesses in Inspection and Enforcement Limit FAA in Identifying and Responding to Risks (GAO/RCED-98-6, Feb. 27, 1998).

Aviation Security: FAA's Procurement of Explosives Detection Devices (GAO/RCED-97-111R, May 1, 1997).

Aviation Security: Commercially Available Advanced Explosives Detection Devices (GAO/RCED-97-119R, Apr. 24, 1997).

Aviation Safety and Security: Challenges to Implementing the Recommendations of the White House Commission on Aviation Safety and Security (GAO/T-RCED-97-90, Mar. 5, 1997).

Aviation Security: Technology's Role in Addressing Vulnerabilities (GAO/T-RCED/NSIAD-96-262, Sept. 19, 1996).

Aviation Security: Urgent Issues Need to Be Addressed (GAO/T-RCED/NSIAD-96-251, Sept. 11, 1996).

Aviation Security: Immediate Action Needed to Improve Security (GAO/T-RCED/NSIAD-96-237, Aug. 1, 1996).

Human Factors: Status of Efforts to Integrate Research on Human Factors Into FAA's Activities (GAO/RCED-96-151, June 27, 1996).